

SI-5 Special Inspection Technical Reporting Guidelines

FINAL REPORT REQUIREMENTS

Revised date: August 18, 2008

Approved date:

Effective date:

Approved by:

Concurred by:

1.0 PURPOSE:

The purpose or this Technical Guideline is to give direction regarding reporting requirements during the performance of special inspection activities. A Final Report is required under section 1704.1.2 of the IBC and 1704.1.2 of SNA-IBC.

2.0 SCOPE

A prime Agency, a subcontracted agency, a special inspector, and registered design professional shall submit specific reports and other documents to the Building Official as outlined in this guideline. These reports and other documents are required at specific stages during the construction of projects that require Special Inspection. The intent of these reports and other documents is to provide the results of observations, tests, and other information that verify work requiring special inspection was inspected and found to be in compliance with the approve construction documents, International Building Code, SNA-IBC and referenced Codes.

3.0 ABBREVIATIONS & ACRONYMS:

CLV-BD City of Las Vegas – Building Department

IAS - International Accreditation Service Inc.

IBC - International Building Code

ICC - International Code Council

New 09-08 1-15 dw: SI-5

NDT - Non-destructive Testing

SIA - Special Inspection Agency

SI - Special Inspection

SNA-IBC - Southern Nevada Amendments to the International Building Code

TG - Technical Guideline

TRG - Technical Reporting Guideline.

4.0 REFERENCES:

IBC 2006 International Building Code.

SNA-IBC 2006 Southern Nevada Amendments to the 2006 IBC.

SI-5 Reporting Guideline (Daily)

5.0 DEFINITIONS:

For the purpose of this technical guideline certain terms, phrases, words and their derivatives shall be construed as specified in this section the IBC, SNA-IBC and the Referenced Codes.

Area Acceptance Report: A report to the Building Official which states that all the required activities for special inspection item(s) such as concrete, steel, masonry, etc. are complete and acceptable for a portion of the permitted work.

Certificate of Compliance: A certificate stating that materials and products meet specified standards or that work was done in compliance with approved construction documents.

Compliance: Conformity in fulfilling official requirements.

Construction Documents: Plans, specifications, supporting calculations and Other data prepare to describe the design, materials, physical characteristics, location, orientation, and scope of a proposed project necessary to obtain a permit.

Daily Report: A report that shall include all inspections, observations, testing activity, non-compliances, area acceptance reports, etc. that took place that day.

Final Report: A formatted final inspection report with a separate section for each category of inspections performed.

Non-Compliance Report: A report to the Building Official and to the Contractor that an item was found that is not conforming to the approved construction documents.

Special Inspection Agency: An agency accredited by the International Accreditation Service (IAS) and approved by the Building Official to conduct special inspections and / or testing as required by the City of Las Vegas.

Record of Correction: A report used to clear non-compliance/non-compliant work.

Registered Design Professional: An individual who is registered or licensed to practice their respective design profession as defined by the

New 09-08 2-15 dw: SI-5

statutory requirement of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

Technical Reporting Guideline: A guideline that provides inspection and testing responsibilities and daily reporting requirements.

6.0 RESPONSIBILITIES:

6.1 Prime Agency

- 6.1.1 It is the responsibility of the Prime Agency to submit a final signed report stating that all work requiring special inspection was inspected, reported and found to be in compliance with the approved construction documents, IBC, and the City of Las Vegas Building Department. The Final Report shall certify that all inspection and testing requirements were completed as required or exceptions taken and documented as being acceptable to the City of Las Vegas Building Department.
- 6.1.2 The agency shall also respond when deficiencies are noted by a CLV-BD representative.
- 6.1.3 The agency shall use CLV-BD forms/templates when applicable.

6.2 Subcontracted Agency

- 6.2.1 It is the responsibility of the Subcontracted Agency to submit a copy of all inspections performed to the Prime Agency.
- 6.2.2 The agency shall also respond when deficiencies are noted by a CLV-BD representative.
- **7.0 PROCEDURE:** Special Inspection Final Reports shall be submitted to CLV-BD, 7551 Sauer Dr, Las Vegas, Nevada, 89128.
 - **7.1 Final Report** shall conform to the following requirements.

7.1.1 Final Report Contents

*Final Report Cover Letter – Agencies must use the CLV Template <u>SI-5-A</u> cover letter format. No additions, deletions, or other edits to this document will be accepted.

*Additional informational documents may be supplied by the Prime Agency. Contradictory statements of compliance shall not be contained within the Final Report.

- *Table of Contents
- *Permit and SI-6 Scope of Work.
- *Signature page of SI-3 Contract.
- *Structural fixes, revisions to the approved construction documents, engineering analysis, designs and calculations shall be signed and stamped by a Nevada registered design professional and approved by CLV-BD Permits.

New 09-08 3-15 dw: SI-5

*Inspector list stating name of each inspector and a copy of his/her signature and qualifications. Inspectors shall be certified/qualified for the inspections they perform.

*Each inspection category shall have its own section; i.e., concrete, masonry, structural steel, etc.

*Each inspection category, section and sub-section, as assigned by SI-6 scope of work shall include daily reports, acceptance reports, test data, noncompliance reports and their resolutions, inspection completion report, and area acceptance report, when applicable. Reports shall be numbered sequentially for each category and noncompliance reports shall have their own subsection, divided into separate categories, having noncompliance and their resolutions numbered sequentially for each category. *Daily inspection reports must comply with the applicable reporting guidelines.

*Inspection completion reports for each category must be included in each section. Inspection completion reports shall be furnished to CLV-BD staff for the structural portion of the work performed.

*Final Reports must be signed and stamped by the agencies Professional Engineer as required by SI-3 and IBC 1704 *Applicable items or reports as deemed necessary by CLV-BD staff.

*Audits and subsequent information (NCRs, engineering, corrections, re-inspections etc.).

*Final Reports that exclude required information or fail to document necessary special inspection activity may be assessed a fee as per the CLV Administrative Code Table 3-D.

7.1.2 Final Report Section Requirements The sections noted are from the form SI-6

Section S

*Steel Construction (IBC Chapter 22, 1704.3 & Table 1704.3)

*Structural Steel Verification as per IBC chapter 2203.

*Structural steel frame and base plate grouting inspections and testing reports.

*All welding and NDT inspection reports and NDT Data Reports. This section shall also contain Welding Qualification Record (Form #WQR-1), supporting documents, WPS, Updates and applicable certs with WQR. *All bolting inspection reports (high strength and non-high strength bolting applications).

New 09-08 4-15 dw: SI-5

- *Reports on H-S bolt testing/inspection with complete documentation (mill certs) per AISC.
- *Light gauge steel inspection daily reports.
- *Fabricator/manufacturer certificate of compliance shall be certified by IAS,AISC,City of Los Angles or on the current list of Approved Fabricators of Clark County NV (Verification of fabricators certificate must be done prior to starting any applicable steel work.) These reports must be contained in subsection S6 or in the applicable sections under high strength bolting, welding, or light-gage steel.

Section C

- *Concrete construction (IBC Chapter 19, 1704.4, Table 1704.4 and SNA-IBC 1704.4).
- *Must include all daily reports covering all items marked SIA on SI-6 scope of work.
- *Concrete category must include the stamped Engineer of Record approved mix designs.
- *Concrete compressive strength data results for the concrete placed at the project site must be included in the Final Report.
- *Precast/pre-stressed concrete product certification shall be furnished with the product when shipped to the job site. The product certification shall be included in the Special Inspection final report.
- *Post-tensioned equipment calibration certifications.

Section M Masonry Construction (IBC Chapter 21 & 1704.5)

- *Must include all daily reports.
- *Masonry compressive strength data results.
- *Engineer of Record approved Mix Designs is required for grout which exceeds 2500 PSI by design.
- *Masonry submittal package.

Section G Soils (IBC Chapter 18 & 1704.7 as amended & SNA-IBC Table 1704.7)

- *Must include all daily reports covering items marked SIA on SI-6 scope of work.
- *Final grading report as required by Section 1803.4 must be included when applicable.

Section PL Pile Foundation IBC 1704.8, 1808, 1809,1810 &1811.

- *Must include all daily reports covering items marked SIA on SI-6 scope of work.
- *Geotechnical engineers pile foundation requirements.

New 09-08 5-15 dw: SI-5

* Pile load test records.

Section PR Pier Foundations (IBC 1704.9, 1808, 1811 &1812)

- *Must include all daily reports covering items marked SIA on SI-6 scope of work.
- *Geotechnical engineers pier foundation requirements.
- *Pier load tests

Section F Sprayed Fire-Resistant Construction (IBC 1704.10)

- *Must include all daily reports.
- *Density lab test results and grid line locations of samples
- *Adhesion & cohesion bond strength test results and grid line locations of where taken.
- *Thickness tests & gridline locations of where taken.
- *Density tests & gridline locations of where taken and test results.
- *Certificate of Compliance form contractor.

Section X Special Cases (IBC 1704.13)

- *Must include all daily reports covering items marked SIA on SI-6 scope of work.
- *Applicable items or reports as deemed necessary by CLV-BD.
- *Rebar/Bolts in epoxy grout is to be inspected by CLV Express inspection – inspection by others will not be accepted.

Section E Special Inspections for Seismic Resistance (1707)

*Must include all daily reports and all other reports specified in sections of SI-6 scope of work marked SIA.

Section T Structural Testing for Seismic Resistance (1708)
*Must include all daily reports and any other reports
specified in sections of SI-6 scope of work marked
SIA.

7.2 CLV-BD Standard Forms

- 7.2.3 Welding Qualification Record (Form WQR)
- 7.2.5 Template SI-5-A Final Report Cover Letter

New 09-08 6-15 dw: SI-5

COMPANY LETTERHEAD ADDRESS, TELEPHONE & FAX

TEMPLATE SI-5-A - FINAL REPORT COVER LETTER

Date:	
Final Report Project Name: Project Address: Permit No.: Application No.:	
SPECIAL INSPECTION NAME performed and completed the special inspection services and testing for the PROJECT NAME project and all work requiring special inspection was inspected, reported and found to be in compliance with the approved construction documents, the IBC and CLV requirements. SPECIAL INSPECTION AGENCY NAME performed required special inspection for Items SUBCONTRACTED AGENCY performed required special inspection for Items	
All inspections performed by SUBCONTRACTED AGENCY were reviewed and accepted by SPECIAL INSPECTON NAME .	
Any items not in conformance, unresolved items or any discrepancies in inspection coverage shall be specifically itemized in this report.	
Attached for your review are the daily inspection reports, testing results, and other applicable reports.	
All required inspections and tests were fulfilled and reported to the best of my knowledge and are in conformance with the approved design drawings, specifications, approved change orders/revisions and the applicable workmanship provisions of the IBC. I certify that I have reviewed this Final Report and found it to be accurate, true and complete to the best of my knowledge.	
	REGISTERED DESIGN PROFESSIONAL SEAL HERE

New 09-08 7-15

7: SI-5



Special Inspection SI-5 Reporting Guidelines

VERIFICATION & DAILY REPORTING REQUIREMENTS

Revised date: August 18, 2008

Approved date: Effective date: Approved by: Concurred by:

1.0 PURPOSE:

The purpose of this Guideline is to specify minimum daily reporting requirements during the performance of special inspection activities. Daily Reports shall be presented in the Final Report per the Final Report Guideline.

2.0 SCOPE: T

The prime agency and special inspector shall prepare specific reports and other documents for submission to the Building Official as outlined in this Guideline. These reports are required at specific stages during the construction of projects that require special inspection. The intent of the these reports is to provide the results of the visual inspections & material tests that verify work requiring special inspection was inspected and found to be in compliance with the approved construction documents and City of Las Vegas specifications.

3.0 ABBREVIATIONS & ACRONYMS:

CLV-BD - City of Las Vegas-Building Department.

IAS - International Accreditation Service Inc.

IBC - International Building Code.

ICC - International Code Council.

NDT - Non-destructive Testing.

SIA - Special Inspection Agency.

SI - Special Inspection.

SNA-IBC - Southern Nevada Amendments to the International Building Code.

TG - Technical Guidelines.

TGR - Technical Reporting Guideline.

New 09-08 8-15 dw: SI-5

4.0 DEFINITIONS:

For the purposes of this special inspection reporting guideline certain terms, phrases, words and their derivatives, shall be construed as specified in this section and the technical codes.

Approved Revisions:

Changes made to the original construction documentation, which have been submitted to City of Las Vegas plan check for review and are accepted.

Area Acceptance Report:

Report to building official that a portion of work is complete & inspection is complete & approved for a given phase of work in defined areas prior to the next phase of work to commence (example: spray applied fire resistive material complete in an area prior to frame and drywall).

Construction Documents:

Plans, specifications, supporting calculations and other data prepared to describe the design, materials, physical characteristics, location, orientation and scope of a proposed project necessary to obtain a permit.

Daily Report:

A report that includes all inspections, observations, testing activity, noncompliances, area acceptance reports, etc. that took place on a specific day.

Inspection Completion Report:

A report to the building official which states that all the required activities for a special inspection category is complete and acceptable for the permitted work.

Non-Compliance Report:

A notification to the Building Official, and to the contractor, that an item was found that was not in conformance with the approved contract documents.

Special Inspection Agency:

An agency accredited by the International Accreditation Agency (IAS) and approved by the Building Official to conduct special inspections and/or testing.

Record of Correction:

A report used to clear non-compliance/non-complaint work.

Special Inspector:

Inspectors/engineers meeting qualification and certification standards of ICC, AWS, ACI and other nationally recognized organizations and is employed by a company accredited by the International Accreditation Agency (IAS).

Special Inspection Reporting Guideline:

A guideline that provides specific daily reporting requirements.

New 09-08 9-15 dw: SI-5

5.0 Responsibilities:

5.1 Special Inspector

* Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards (see IBC Section 1704)

*The special inspector may only perform inspection services that he/she is certified for by ICC and other.

*The special inspector shall use the most recent CLV-BD approved construction documents

*The special inspector shall maintain copies of all inspections and laboratory reports at the job site until all special inspection and/or testing is completed.

6.0 PROCEDURE:

6.1 Daily Inspection Report [(IBC Chapter 17)]

6.1.1 Author

*Printed Name

*Signature

6.1.2 Content

*The report shall contain the permit number, the project address, date, and a description of the area inspected (gridlines or other method to clearly identify the area). The daily reports shall be legible and signed by the special inspector that performed the work.

*Reports shall be numbered sequentially for each category as per the attached Inspection Report Designation Numbering System guideline (Appendix A).

*Daily Inspection Report Log – Each Section shall have an inspection report log showing sequentially numbered reports, date, brief description and inspectors name.

*Document that the CLV-BD approved construction documents are on site and used to perform the inspection, including references to the detail and page numbers and all other applicable sources to describe what was physically inspected or taking place.

*The phrase "As per approved plans and specifications" shall not be used as a catch-all phrase.

*All material inspection reports must include documentation of identification markings which must conform to ASTM standards specified in the approved construction documents, and verify manufacturer's certified mill test reports when required.

New 09-08 10-15 dw: SI-5

*The special inspector shall document violations of the IBC, and approved construction documents, as a Non-Compliance Report.

*Only one inspection category activity shall be documented in the daily report. For example, concrete reinforcing steel and masonry reinforcing steel shall each have their own daily report.

*Only one inspection subcategory activity shall be documented in the daily report. For example, structural steel erection and welding shall each have their own daily report. *Structural fixes and revisions to the approved construction documents, engineering analysis, designs, and calculations shall be signed and stamped by a Nevada registered design professional and approved by CLV-BD, and be attached to or referenced in the daily report.

6.1.3 Frequency

*The special inspector shall write a daily report for each day he/she is on the project site.

6.2 Non-Compliance Report

6.2.1 Author

*Printed Name

*Signature

6.2.2 Content

*The report shall contain the permit number, the project address, date and a description of the specific area or equipment inspected (gridlines or other methods to clearly identify the area or equipment).

*Upon identifying a non-compliant item the special inspector shall immediately notify the contractor of the condition.

*This report shall contain a description of the deficiency with references to the use of unapproved documents, if applicable. This report is to be <u>written immediately</u> upon finding such deficiency.

*A separate non-compliance report shall be written for each type of non-complying item/condition.

*The inspector shall clearly identify and describe the current condition of the item.

*The inspector shall state why the item is in non-compliance.

*The non-compliance report shall reference the daily report number.

*The inspector shall state if an additional inspection is needed in order to clear the non-compliance report or if a resolution from the Registered Design Professional may be required in order to resolve it.

New 09-08 11-15 dw: SI-5

*The inspector shall clearly identify and describe the current condition of the item

*Non-Compliance Reports shall be placed at the beginning of each corresponding section (example: Section S steel – NCR on steel, Section C Concrete – NCR on concrete etc.). Each section shall have an index log with NCRs sequentially numbered, for each category as per the Inspection Report Designation Numbering System Guideline (Appendix A), dated, and a brief description of the NCR. The name of the inspector issuing the NCR – Record of Correction (ROC), date and name of inspector issuing ROC.

6.2.3 Frequency

*Upon identifying non-complying item or condition the Special Inspector shall write an NCR and immediately notify the contractor of the condition, also fax NCR to Rod Clark at CLV @ 474-7369.

*If NCR item is not resolved in a timely manner or is about to be incorporated into the work, notify the City of Las Vegas Building Department's Area Inspection Supervisor immediately and post a discrepancy notice.

*The SI is not authorized to approve deviations from approved drawings and specifications unless approved by the structural engineer of record and by the Building Department, when required.

*NCRs that are addressed by the structural engineer of record with engineering fixes and any revisions to approved drawings are to be submitted to Building Department Permits for review and approval. All revisions are to be dated, clouded and marked with delta numbers, with a written scope of work.

*NCRs are to be included in the SI's daily and weekly reports, including reports on how the non-complying items are resolved or unresolved. Project sites and Reports are subject to unannounced audits by the City of Las Vegas Building Department and/or by the International Accreditation Service (IAS).

*NCR's generated by the Special Inspector are to be faxed by the SI agency daily to **Rod Clark, Plans Examination Supervisor at 702-474-7369.** Indicate the permit number, job name, address, and the City of Las Vegas plan check number.

*An NCR Tracking Summary Report (see attached) must be emailed, faxed, or mailed to The City of Las Vegas area inspection supervisor on the 2nd and 4th Friday of the month.

New 09-08 12-15 dw: SI-5

6.3 Record of Correction

6.31 Author

*Printed Name

*Signature

6.3.2 Content

*The report must contain the permit number, the project address, date and a description of the area inspected (gridlines or other method to clearly identify the area).

*Record of correction reports shall be included in the non-compliance section. It shall be numbered to correspond to, and make reference to, the non-compliance it is clearing. *One record of correction item per report.

*The inspector must state the current condition of the item.

*The inspector must state how the condition has been resolved and that the work is in compliance with CLV-BD approved resolution to the construction documents.

*Record of correction reports shall be accompanied by the structural fixes including any sketch, detail, engineering analysis. And calculations approved by CLV-BD that were needed to clear the non-compliance report.

*If applicable the report shall also identify and describe the re-inspection/testing process, results and location.

6.3.3 Frequency

*Full size drawings that contain the NCRs and the Engineer of Records resolution and/or fixes must be submitted to the Building Department Permits for Plan Review and Approval. *A record of correction shall be written when a reported non-compliance item/condition has been addressed by the engineer of record and approved by CLV-BD Plan Check and / or re-inspected.

6.4 Area Acceptance Report

6.4.1 Author

*Printed Name

*Signature

6.4.2 Content

*The report must contain the permit number, the project address, and date.

*The report must be a stand alone document.

*The area acceptance report shall be included in the daily report category and be numbered sequentially per the attached Inspection Report Designation Numbering System Guideline.

*The report must identify the area accepted (gridlines or other method to clearly identify the area).

New 09-08 13-15 dw: SI-5

*The report must reference the daily reports and state that all the work performed in the area specified is in compliance with the approved construction documents.

*An area acceptance report for each category is to be written for each level/floor or specific phase of work completed and can be incorporated into continuing work.

6.5 Inspection Completion Report

6.5.1 Author

*Printed Name

*Signature

6.5.2 Content

*The report must contain the permit number, the project address, and date.

*The report must be a stand alone document.

*Each category must have its own inspection completion report.

*The report must reference the daily reports, any noncompliance report and the corresponding record of correction, and state that all the work performed is in compliance with the approved construction documents.

6.5.3 Frequency

*Each category must have its own inspection completion report

*This document must be the last report within each category to be presented in the final report.

7.0 CITY OR LAS VEGAS BUILDING DEPARTMENT AUDITS

7.1 Content

*Copy of all audits

7.1.2 Audits

*Require a written Audit Response Report (ARS) indicating action taken to each item. ARS to be placed with copy of audits in jobsite record book and final report. ARS shall show all supporting documents and info including documentation of all re-inspections of corrected/completed items.

7.2 ATTACHMENTS:

7.2.1 Appendix A Inspection Report Designation Numbering System Guideline

7.2.2 NCR TRACKING SUMMARY REPORT

New 09-08 14-15 dw: SI-5



SI-5

Special Inspection Technical Guidelines Appendix A

REQUIRED INSPECTIONS AND PROCEDURES Inspection Report Designation Numbering System Revised 8-18-08

The following is a summary of Field Inspection Report Designation System. The system is based on Special Inspection categories specified on S1-6 form and shall be designated and placed in sequential order in jobsite report binders and final reports. The system is to be used by all special inspection personnel on all reports including daily, final, NCRs and Record of Correction.

Reports will be designated and filed as per lettered section and letter with number subsection assigned by the S1-6 Scope of Work, then sequentially numbered and dated.

Example: Daily Report S2-4

Section **S** – Steel Construction Subsection **S2** – Welding

#4 would be for fourth inspection

NCR and ROC will be similarly designated and numbered.

Example: NCR S2-3

For third NCR written on steel welding

ROC S2-3

Record of Correction for third NCR on steel welding

All sections and subsections checked on S1-6 will be required in daily records and final reports.

Example: **DR-S2-3**

Daily Report, Section S, Subsection S2-3 welding, third report

written

New 09-08 15-15 dw: SI-5